

CLAIMS

What is claimed is:

1. An apparatus for transferring fluids comprising an axially expandable and collapsible conduit fixedly attached at one end and extendible at the other end allowing said transferring fluids from said fixed end to said extendible end and wherein expansion of said conduit is performed by an increased gas pressure applied to inside of said conduit and where contraction of said conduit is performed by a decreased gas pressure applied to inside of said conduit.
2. The apparatus of claim 1 wherein said fluids are selected from the group consisting of air, water, sewage, black water, gray water, fresh water, potable water, non-potable water, water additives, fuels, oils, foodstuffs, construction materials, chemicals, and fertilizers.
3. The apparatus of claim 1 wherein said conduit when in a retracted state is stored in a position allowing extension from a position selected from the group consisting of substantially opposite said fixedly attached end, proximately located next to said fixedly attached end, and substantially 90 degrees to said fixedly attached end.
4. The apparatus of claim 1 wherein said conduit when in an extended state extends beyond a vehicle edge substantially without a shroud or tubular housing.
5. The apparatus of claim 1 wherein said increased gas pressure is from a source of compressed air.

6. An apparatus for waste evacuation having an extendible conduit for waste transfer, a nozzle assembly having a fitting attached to said extendible conduit, and a valve assembly within said nozzle assembly which allows for control of said waste transfer from said extendible conduit through said nozzle assembly.

7. The apparatus of claim 6 wherein said valve assembly further comprises a manually operable valve.

8. The apparatus of claim 7, further comprising a mechanical interlock mechanism comprising a nozzle storage housing and a member attached to said manually operable valve such that when said nozzle assembly is stored in said nozzle housing said manually operable valve is closed.

9. The apparatus of claim 6 wherein said valve assembly further comprises an electrically operable valve.

10. The apparatus of claim 9 further comprising a remote control device for operating said electrically operable valve.

11. The apparatus of claim 9, further comprising an interlock mechanism such that when said nozzle assembly is stored in said nozzle housing said electrically operable valve is closed.

12. The apparatus of claim 6, wherein said fitting allows movement of a substantial part of said nozzle assembly with respect to said extendible conduit.

13. The apparatus of claim 12, wherein said movement is selected from the group consisting of rotation, pivoting, tilting, and such movement as allowed by a ball joint fitting.

14. The apparatus according to claim 6, wherein said nozzle is capable of mating with a receptacle having a receptacle fitting selected from the group consisting of friction fit, pressure fit, gravity fit, screw, bayonet, quick disconnect, magnetic, spring, and expandable collar.

15. The apparatus of claim 6 further comprising a mechanism for creating air pressure or reduced air pressure for extending and retracting said extendible conduit.

16. The apparatus of claim 6 further comprising a mechanism in communication with said extendible conduit for extending said extendible conduit.

17. The apparatus of claim 16 further comprising a remote control device for operating said mechanism.

18. The apparatus of claim 16 wherein said mechanism for extending said extendible conduit is selected from the group consisting of a pressure pump, a vacuum pump, means for creating air pressure, means for creating a vacuum, a handle for a user to manually extend said extendible conduit, a push rod, a screw, a gear, a grabbing fork, a friction wheel,

and a spring.

19. The apparatus of claim 6 further comprising a mechanism in communication with said extendible conduit for retracting said extendible conduit.

20. The apparatus of claim 19 further comprising a remote control device for operating said mechanism.

21. The apparatus of claim 19 wherein said mechanism for retracting said extendible conduit is selected from the group consisting of a pressure pump, a vacuum pump, means for creating air pressure, means for creating a vacuum, a handle for a user to manually retract said extendible conduit, a cable, a rope, a screw, a gear, a grabbing fork, a friction wheel, and a spring.

22. An apparatus for controlling a waste flow, said apparatus comprising:

a nozzle assembly having a valve;

a fitting coupled to said nozzle assembly; and

an extendible hose coupled to said fitting, such that said valve may be operated to control said waste flow from said extendible hose through said nozzle assembly.

23. The apparatus according to claim 22, wherein said fitting coupling said nozzle assembly and said extendible hose is such that said nozzle assembly is positionable at a plurality of angles.

24. The apparatus according to claim 22, wherein said nozzle is capable of mating with a receptacle having a receptacle fitting selected from the group consisting of friction fit, pressure fit, gravity fit, screw, bayonet, quick disconnect, magnetic, spring, and expandable collar.

25. An apparatus comprising:

means for controlling waste flow, said means for controlling waste flow including a valve; and

means for conveying waste to said means for controlling waste flow, said means for conveying waste including an extendible and retractable conveying means.

26. The apparatus of claim 25 wherein said extendible and retractable conveying means further comprises an extendible and retractable hose.

27. The apparatus of claim 26 wherein said extendible and retractable hose further comprises a coloration scheme selected from the group consisting of a clear hose, a colored hose, a hose displaying a distinctive pattern when extended, and a hose displaying a distinctive pattern when retracted.

28. The apparatus of claim 26 wherein said extendible and retractable hose further comprises means for extending said extendible and retractable hose.

29. The apparatus of claim 28 wherein said means for extending said extendible and retractable hose is selected from the group consisting of pressure means, vacuum means,

means for a user to manually extend said extendible and retractable hose, push means, screw means, gear means, friction means, grabbing means, and spring means.

30. The apparatus of claim 26 wherein said extendible and retractable hose further comprises means for retracting said extendible and retractable hose.

31. The apparatus of claim 30 wherein said means for retracting said extendible and retractable hose is selected from the group consisting of pressure means, vacuum means, means for a user to manually retract said extendible and retractable hose, pull means, screw means, gear means, friction means, grabbing means, and spring means.

32. An apparatus comprising:

a waste source having an outlet; and

an extendible hose having two ends, wherein a first end of said extendible hose is attached to said outlet and a second end of said extendible hose has a cover.

33. The apparatus of claim 32 wherein a valve is located between and in communication with said outlet and said first end of said extendible hose.

34. The apparatus of claim 32 wherein said cover is selected from the group consisting of a cap, a cap and bayonet assembly, a plug, a clamping device, a second valve, a nozzle, and a nozzle having a valve.

35. An apparatus for controlling waste flow comprising:

a nozzle assembly having a fitting at a first end of said nozzle assembly, a nozzle at a second end of said nozzle assembly, and a valve positioned between said first and second end of said nozzle assembly; and

an extendible hose coupled to said fitting, such that said valve may be operated to control said waste flow from said extendible hose through said nozzle.

36. The apparatus according to claim 35, wherein said nozzle is capable of mating with a receptacle having a connection means selected from the group consisting of friction fit, pressure fit, gravity fit, screw, bayonet, quick disconnect, magnetic, spring, and expandable collar.

37. A method for waste evacuation comprising:

extending an extendible hose coupled to a nozzle assembly having a valve and a discharge nozzle;

mating said discharge nozzle with a receptacle for receiving waste;

operating said valve to control waste evacuation flow; and

when done retracting said extendible hose.

38. The method of claim 37 wherein extending and retracting further comprises using increased air pressure to extend, and reduced air pressure to retract said extendible hose.

39. The method of claim 37 further comprising communicating a payment and/or credit.

40. An apparatus for waste evacuation comprising a flexible conduit for conveying waste wherein one end of said flexible conduit is permanently attached and another end of said flexible conduit is extendible in distance.

41. The apparatus of claim 40 wherein said flexible conduit comprises one or more passageways for conveying said waste.

42. The apparatus of claim 40 wherein said permanently attached end is located more proximally to a source of said waste than said another end which is more distally located to said source of said waste.

43. The apparatus of claim 40 wherein said another end is extendible to be capable of coupling to a receptacle for receiving said conveyed waste.

44. The apparatus of claim 43 wherein said extendible end further comprises a nozzle.

45. The apparatus of claim 44 wherein said nozzle is connected to said extendible end of said flexible conduit to allow movement between said nozzle and said conduit selected from the group consisting of swivel, rotation, pivot, tilt, and a combination of swivel, rotation, pivot, and tilt.

46. An apparatus for waste evacuation comprising a flexible conduit for conveying waste wherein one end of said flexible conduit is substantially permanently attached and another end of said flexible conduit is extendible in distance.

47. The apparatus of claim 46 wherein said substantially permanently attached flexible conduit end is proximally located to a valve.

48. The apparatus of claim 47 wherein said valve is located on a side of a vehicle opposite a driver's side of said vehicle.

49. The apparatus of claim 46 wherein said extendible end of said flexible conduit extends from a side of a vehicle on a same side as a driver's side of said vehicle.

50. The apparatus of claim 46 wherein said substantially permanently attached flexible conduit end is proximally located to a valve capable of controlling said waste evacuation located on a passenger side of a vehicle, said flexible conduit routes to a driver's side of said vehicle, and said flexible conduit is extendible from said driver's side of said vehicle a distance from said driver's side.

51. An apparatus for waste evacuation comprising a collapsible and extendible hose, having two ends, for conveying waste wherein said first end of said hose is in communication with a waste flow controlling valve located on a passenger side of a vehicle and said second end of said hose routes substantially to a driver's side of said vehicle and is capable of extension beyond the driver's side of said vehicle.

52. The apparatus of claim 51 wherein said extension beyond the driver's side of said vehicle is allowed by a panel opening located on the driver's side of said vehicle.

53. The apparatus of claim 51 wherein said extension beyond the driver's side of said vehicle is allowed by a panel opening located on an underside of said vehicle.

54. The apparatus of claim 51 wherein said collapsible and extendible hose is extended by being in communication with a source of increased gas pressure.

55. The apparatus of claim 51 wherein said collapsible and extendible hose is retracted by being in communication with a source of decreased gas pressure.

56. An apparatus for waste evacuation comprising:

a waste storage receptacle having an outlet;

a flexible extendible hose having a first end and a second end, said first end permanently proximally connected with said outlet; and

a nozzle having an input and an output, said second end coupled to said input.

57. The apparatus of claim 56 wherein said output is capable of being coupled to a second receptacle for receiving waste from said waste storage receptacle.

58. The apparatus of claim 56 wherein said flexible extendible hose extends from an exit point on a vehicle selected from the group consisting of left side, right side, front, and rear.

59. The apparatus of claim 56 wherein said flexible extendible hose extends from underneath a vehicle.

60. The apparatus of claim 56 further comprising a drop door behind which is located said hose.

61. The apparatus of claim 60 further comprising controls for automatically extending and retracting said flexible extendible hose.

62. The apparatus of claim 56 further comprising a remote control for extending and retracting said flexible extendible hose.

63. A method for transferring waste comprising:

- operating a second control to extend a hose;

- placing said hose in a drain;

- operating a third control to allow waste to flow through said hose into said drain;

- removing said hose from said drain; and

- operating a fourth control to retract said hose.

64. The method of claim 63 further comprising

- operating a first control to open a door before said operating second control; and

- operating a fifth control to close said door after said operating fourth control.

65. The method of claim 63 wherein said placing said hose into a drain further comprises placing a nozzle connected to said hose into said drain.

66. The method of claim 63 wherein said operating is controlled by a remote control.

67. A method for transferring waste comprising:

attaching one end of a collapsible and extendible in length hose permanently to a source of waste;

extending the other end of said collapsible and extendible in length hose;

placing said extended end of said collapsible and extendible in length hose in contact with a receptacle;

opening a valve to allow waste to flow through said collapsible and extendible in length hose into said receptacle;

removing said collapsible and extendible in length hose from contact with said receptacle; and

retracting said collapsible and extendible in length hose.

68. An apparatus comprising;

a collapsible and extendible in length sewer hose having a first end connected at all times, and

a storage tube for housing said collapsible and extendible in length sewer hose.

69. The method of claim 68 wherein said collapsible and extendible in length sewer hose has a second end which is extendible from said storage tube.

70. The apparatus of claim 69 wherein a valve is located proximate to said first end.

71. The apparatus of claim 70 wherein a second valve is located proximate to said second end

72. The apparatus of claim 70 wherein said collapsible and extendible in length sewer hose may be non-manually extended from said storage tube.

73. The apparatus of claim 70 wherein said collapsible and extendible in length sewer hose may be non-manually retracted into said storage tube.